

REMARKS

Present Status of the Application

The Office Action mailed on November 21, 2003 rejected claims 1-7. Claims 1 and 4 are objected to due to typing errors. The specification is objected to due to informalities. The Office Action also objected to the drawings. In addition, the Office Action rejected claims 1 and 4 under 35 U.S.C. §112, second paragraph. The Office Action rejected claims 1 and 2 under 35 U.S.C. 102(b), as being anticipated by Otagaki et al. (JP11146557). The Office Action also rejected claim 3-7 under 35 U.S.C. 103(a), as being unpatentable.

Applicants have amended claims 1 and 4 to more clearly define the invention. As amended, these claims clearly distinguish from the prior art, and therefore overcome the rejections under 35 U.S.C. 102 and 103. No new matter adds through the amendments. After entry of the foregoing amendments, claims 1-7 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Office Action Rejections and Objections

Claims 1 and 4 are objected to due to typing errors. Applicants have amended claims 1 and 4 to overcome the objection.

The specification is objected to due to informalities, and the Office Action also objected to the drawings. In addition, the Office Action rejected claims 1 and 4 under 35 U.S.C. 112, second paragraph. These objections and rejections come from the alleged unclear description of the second capacitors. In the specification, the second capacitors are referred to capacitors Cy1, Cy2 and Cy3, which have been shown in Fig. 1. Applicants have amended claims 1 and 4 and the corresponding descriptions in the specification to clarify the description of the second

capacitors. There amendments are fully supported by the original disclosure (for example, Fig. 1). Applicants respectfully submit that these objections and rejection have been properly addressed and should be withdrawn.

Turning now to the substantive rejections, the Office Action rejected claims 1-2 under 35 U.S.C. 102(b), as being anticipated by Otagaki et al. (JP11146557). The Office Action also rejected claim 3-7 under 35 U.S.C. 103(a), as being unpatentable. Applicants respectfully traverse the rejections for at least following reasons.

Claims 1 and 2 were rejected under 35 U.S.C. 102(b) as being anticipated by Otagaki. The Office Action alleged that Otagaki has disclosed every claimed feature in claims 1 and 2 of the present invention. Applicants respectfully disagree.

Independent claim 1 recites following features:

"a leakage current suppressing circuit, having a clamper for clamping a voltage, and connected between nodes of the second capacitors and the metal frame,

wherein in the noise filter, one end of each second capacitor is connected to an AC power line through a corresponding common mode reactor coil, and the other end of the each second capacitor is connected to the leakage current suppressing circuit, and each of the first capacitors is connected between two of the AC power lines"

Claim 1 recites that one of each second capacitor connects to an AC power line through a corresponding common mode reactor coil. In the Otagaki reference, the power from the power source goes to the Y capacitors 22 first, and then to the common mode reactor coil 23. The voltage clamping circuit 20 is connected to the Y capacitors 22. Refer to paragraphs [0021], [0022] and Fig.3, etc.

According to the structure of the present invention as defined in claim 1, the power will pass through the common mode reactor coils L1 first, and then the second capacitors Cy1, Cy2, Cy3. Clearly, the claimed circuit structure of the present invention is different from that of Otagaki.

According to structure as recited in the amended claim 1, the leakage current, which is caused by the floating capacitance generated between the power lines and the main body through the refrigerant in the compressor main body, can be reduced through the phase adjustment of the clamper. Additionally, the increase of the noise terminal voltage due to the existence of the clamper can also be suppressed. The legal regulation requirements of both the leakage current and the noise terminal voltage can be met. Due to the structural difference, Otagaki cannot achieve the above functions.

In addition, as recited in claim 2, the clamper in the leakage current suppressing circuit is formed by opposite connected Zener diodes. Therefore, the leakage current resulting from the voltage lower than the Zener voltage will not flow from the noise filter to the frame. At least, the leakage current due to the voltage lower than the Zener voltage can be cut off, so that the leakage current can be effectively reduced.

For at least the reasons discussed above, the Otagaki fails to disclose every element of claims 1 and 2. Therefore, claims 1 and 2 are not anticipated by, and patently define over Otagaki. The rejection under 35 U.S.C. 102(b) should be withdrawn.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otagaki in view of Moyer (US 3969614). As discussed above, Otagaki fails to disclose every feature of claims 1 and 2. Moyer teaches a Zener diode with a breakdown voltage between 10V and 30V. However,

Moyer clearly cannot cure the above-mentioned deficiencies of Otagaki. Therefore, claims 1 and 2 are patentable over Otagaki and Moyer. Claim 3 depends from claim 2 and, for at least the same reasons, claim 3 is also patentable over Otagaki and Moyer.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Otagaki in view of Karwath (US 6169378). Independent claim 4 of the present invention recites following features similar to that of claim 1:

"a leakage current suppressing circuit, having a clamper for clamping a voltage, and connected between nodes of the second capacitors and the metal frame,

wherein in the noise filter, one end of each second capacitor is connected to an AC power line through a corresponding common mode reactor coil, and the other end of the each second capacitor is connected to the leakage current suppressing circuit, and each of the first capacitors is connected between two of the AC power lines"

Therefore, for at least the same reasons as discussed above in connection with claim 1, Otagaki at least fails to disclose the above emphasized features of claim 4. Karwath discloses a voltage clamper. However, Karwath cannot cure the deficiencies of Otagaki discussed above. Therefore, the proposed combination still fails to disclose every feature as recited in claim 4. Claim 4 is thus patentable over Otagaki and Karwath.

Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Otagaki in view of Moyer. As discussed above above, claim 4 is patentable over Otagaki and Karwath. Moyer cannot cure the deficiencies of Otagaki and Karwath. Therefore, claim 4 is patentable over Otagaki, Karwath, and Moyer. Claims 5-7 depend from claim 4 and, therefore, are also patentable over the proposed combination.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that all pending claims 1-7 are in proper condition for allowance. If the Examiner believes that a conference would be of value in expediting the prosecution of this application, he is hereby invited to telephone the undersigned counsel to arrange for such a conference.

Respectfully submitted,

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